

IN THE CLAIMS

Claim 1 (currently amended): A drive circuit to supply drive current to a load resistor that is connected to a first power voltage supply ~~element~~ terminal, comprising:
a current output MOS transistor connected in series with the load resistor,
a drive part that is connected to a second power voltage supply element and that supplies a drive signal to the gate terminal of the current output MOS transistor, and
a clamp circuit that is connected to the second power voltage supply terminal to hold the drain terminal of the current output MOS transistor at a predetermined potential.

Claims 2-6 (cancelled)

Claim 7 (currently amended): The drive circuit of Claim 1, wherein the drive part includes:

a first MOS transistor that is connected to the gate terminal of the current output MOS transistor and that supplies the drive signal to the current output MOS transistor, and

a ~~second~~ first current source that supplies current to the ~~fourth~~ first MOS transistor.

Claim 8 (currently amended): The drive circuit of Claim 7 wherein the drive part further comprises a second current source that is connected between the source terminal of the first MOS transistor and ~~the~~ a reference potential of the first MOS transistor, ~~being~~ wherein said first MOS transistor is an NMOS transistor, and a second NMOS transistor that is connected between the first current source and the reference potential and that operates complementarily with the first NMOS transistor, and

the first current source comprises a first PMOS transistor that is connected between the second power supply voltage terminal and the first NMOS transistor and whose gate terminal and drain terminal are connected together, and a second PMOS transistor that is connected between the second power supply voltage terminal and ~~the~~

a common connection point of the gate terminal of the current output MOS transistor and the first NMOS transistor, and whose gate terminal is connected to the gate terminal of the first PMOS transistor.

Claim 9 (currently amended): The drive circuit of Claim 8 wherein the drive part further comprises a first resistive element that is connected between the drain terminal of the third PMOS transistor and the drain terminal of the ~~fifth~~ second NMOS transistor, and a second ~~resistance~~ terminal that is connected between the second power supply voltage terminal and the gate terminal of the ~~third~~ first PMOS transistor.